These leading-edge computer products enable analysts to identify worst-case scenarios, test protective force operations, and recommend proper security upgrades. The tools ensure deployment of effective security systems and minimize performance testing. In addition, VARC provides services in:

- emergency management,
- transportation safeguards, and
- buffer-zone analysis.

VARC also provides support for cyber security, Sensitive Compartmented Information Facility security, security planning and implementation, conducting force-on-force exercises, and evaluation and deployment of technologies. These resources can be appropriately integrated to effectively address the most challenging security needs.

To learn more about how you can tap into the unique capabilities of Y-12's Vulnerability Assessment Resource Center, contact:

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BWXT
Y-12
Protecting America's Future

NNSA
National Nuclear Security Administration

Vulnerability Assessment Resource Center

FOCUSING ON THE WORLD'S
SECURITY NEEDS

Y-12's Vulnerability Assessment Resource Center Can Meet the Most Challenging Security Needs

Protecting critical assets and infrastructure has long been a Y-12 core competency. We are proud of 20 years of experience in conducting comprehensive vulnerability assessments and providing practical application of the most advanced security technologies available.

Y-12's Vulnerability Assessment Resource Center (VARC), a Work for Others program, is operated by BWXT Y-12 for the National Nuclear Security Administration (NNSA). Drawing on personnel with extensive expertise and decades of proven methodologies, VARC can identify and mitigate vulnerabilities within critical infrastructures throughout the world. By using accepted methodologies and advanced computer modeling capabilities, VARC provides:

- vulnerability assessments,
- threat and risk analysis, and
- computer modeling and simulation.

The unique skills of the VARC staff, as well as the resources throughout the Y-12 National Security Complex, make this center a unique and valuable asset for those seeking to identify and mitigate vulnerabilities against outside threats.
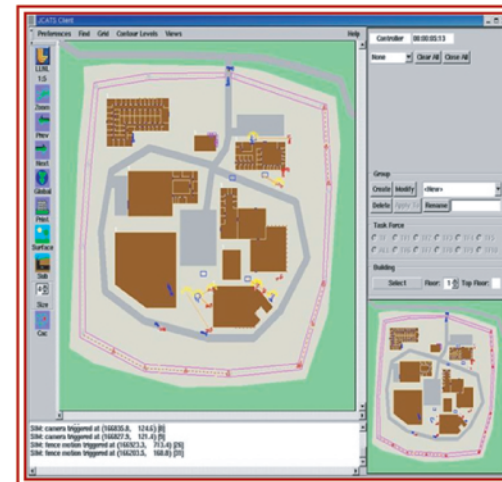
APPLICATION

VARC provides current, relevant technologies applied during facility and process evaluations. Using these accepted vulnerability assessment and nuclear material control methodologies, an inclusive and sustainable safeguards and security program can be maintained in critical infrastructures worldwide.

VULNERABILITY ASSESSMENT PROCESS

Select Vulnerability Assessment Team

Characterize Threat and Target

Characterize Facilities and Protection System

Search for Vulnerabilities and Develop Scenario

Evaluate System Effectiveness

Identify and Prioritize Protection Upgrades
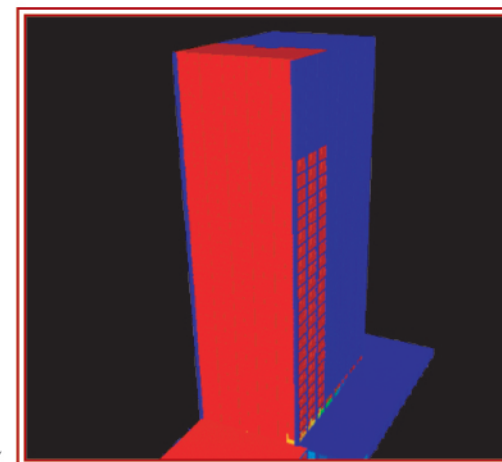
PROTECTED FACILITY

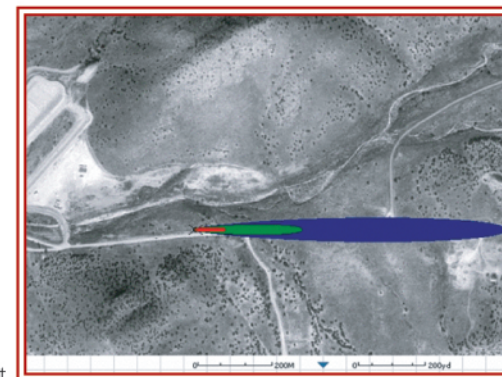VARC offers an extensive computer laboratory for computer modeling and simulation analysis. Our systems use:

- Joint Conflict And Tactical Simulation (JCATS) software,
- ASSESS (Analytical System and Software for Evaluating Safeguards and Security),
- Blast Effects using Blast FX and Smart Model Target Generator,
- HotSpot Gaussian Plume Dispersion modeling software.

JCATS

Blast FX

HotSpot

Y-12's Vulnerability Assessment Resource Center